

IRRIGATION IN PROVO

We are told that as irrigation was new to most pioneer farmers, it presented many new problems. Probably the question of how much water and how often to irrigate the land was one of the hardest to solve. As water was plentiful most of the men used too much water and it took several years of experience to train them to the amount that was necessary to mature a good crop.

"The amount of land that could be irrigated by Provo River was at first looked upon as being quite limited, but gradually more acreage has been brought under cultivation until the waters of Provo River are now carried into Salt Lake Valley. The first land to be farmed was that within easy reach of the river. The Turner ditch and the East Union Canal were dug in 1850. In 1868 work was begun on the Provo Bench Canal, and in 1874, the second East Union Ditch Company was organized, and a canal constructed in the northeastern part of the settlement. W. Wallins, John G. Jones and Robert T. Thomas were prime movers in effecting the organization. So far there has been no serious controversy over water, but when Midway, in Provo Valley, was constructed and began taking water from the river in 1879, an objection was raised. It was contended that Provo City was already short of water and the supply should not further be reduced. However, Midway got the water and Provo Valley since that time has continued to take more water from the river, notwithstanding the objections of Provo City. But the lower valley has not suffered therefrom; in fact, it has derived benefit, as the water taken out on the higher level in the spring and early summer when water is plentiful, has to a large extent seeped back into the river and increased the flow later in the season when water is not so plentiful. (Ibid) page 244."

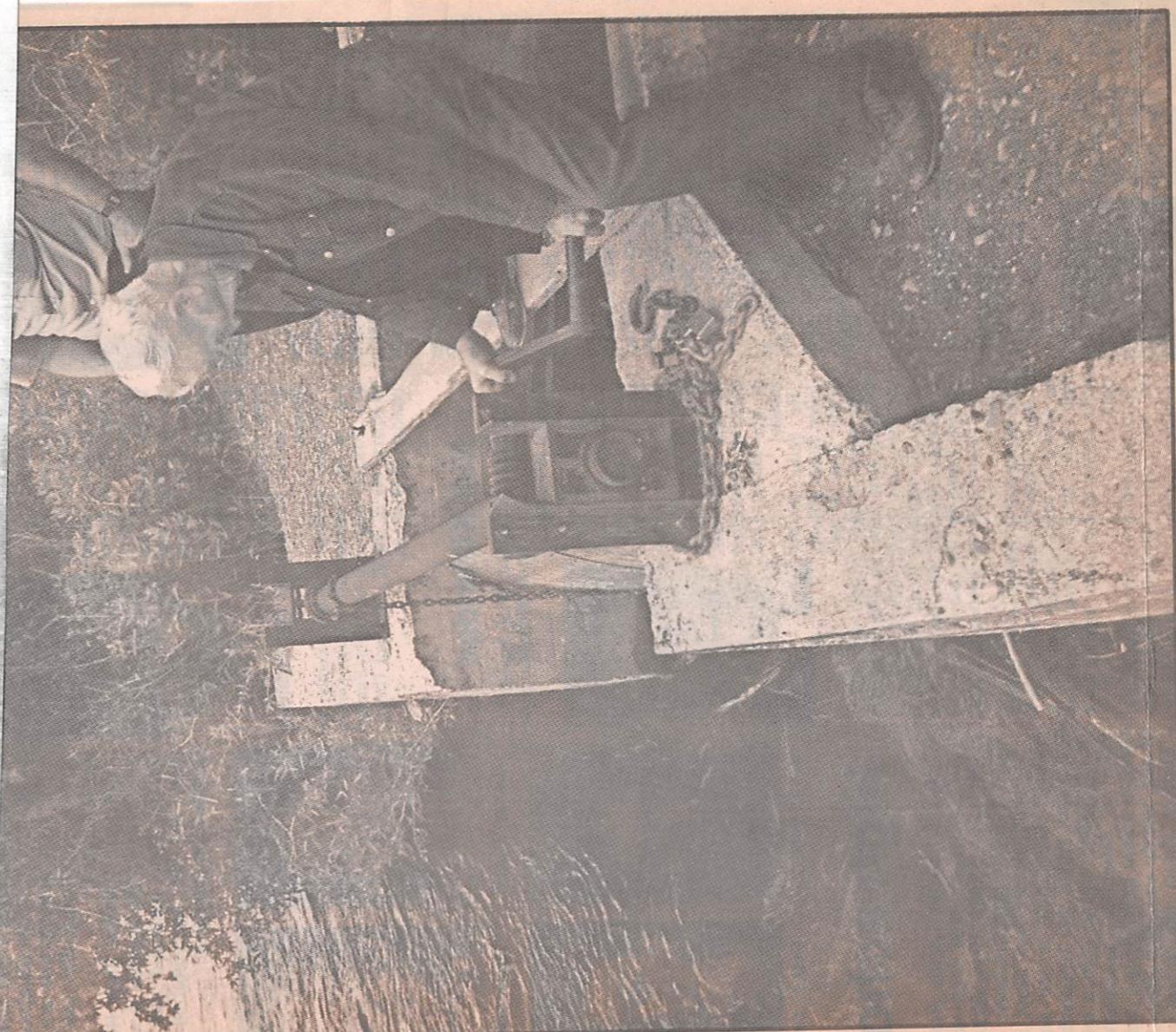
Towns and cities alike had their network of city irrigation ditches along every street. Each spring men or boys were called to work on the ditches, cleaning the accumulated grass, rubbish, and weeds.

"There were so many irrigation ditches in Provo in the early days that the maintenance of good roadways was a difficult matter, and owners of lots on the east side of main street, now Fifth West, were notified, 'To make their water ditch on the east side of said street, as they would not be allowed to take water across Main street to irrigate their gardens.' This was about 1853, while the second city council was functioning."—Jensen's *History of Provo*.

"Their carefully cultivated farms and gardens spoke well for them. The neatness of their cottages, excellent fences surrounding them, the numerous channels cut from the mountains and down through the streets of the town, for supplying a plentiful, convenient

"Heart Throbs of the West 1:275-6
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and healthful supply of pure water to every house as well, too, for the irrigation of their land."—*Deseret News*.



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Stanley Roberts Jr. (top) and his 90-year-old father, Stanley Sr., check canal water flow from the Provo River near the mouth of Provo Canyon.

Herald Photo/Dennis Patterson

Water name of their game

Water once was the only livelihood in Utah Valley

By SHARON M. HADDOCK

Herald Staff Writer

Watermaster runs in the Roberts family.

Stanley H. Roberts Jr. is a watermaster as well as the Provo River Water Commissioner.

His 90-year-old father has been a watermaster and involved in water management for more than 35 years in Utah Valley.

"Forty years ago, this valley was quite different," Roberts said.

"Agriculture was the main livelihood. Prior to Geneva, it was the only livelihood. Orem and Provo were just a fraction of the size they are now. Orem was all orchard."

When the pioneers came into the valley, Roberts said the first thing they did was to divert water to cover and nurture the ground.

Canals became an important priority because without water, the ground was worthless.

What couldn't be grown was purchased through the sale of food raised in the soil.

"Water became the paramount issue," Roberts said.

Watermasters became important individuals, in charge of making certain the water was delivered fairly and promptly to all those with rights.

The watermaster arbitrated

when misunderstandings arose, taught newcomers about handling the water turns, reprimanded



A Day's Pay

"If people feel they can trust you, then they respect the authority. They expect to be treated fairly. People with complaints like to feel they've been heard."

He started working the canals as a boy, cleaning brush and debris from the channels each year as the communities readied the canals for the summer runs.

He became a civil engineer — interested in the hydrology classes and in understanding where water comes from, where water goes — before he signed on in 1972 as the full-time Provo River Water Commissioner.

He now oversees the Timpanogos Canal and assists his father with the Upper East Union Canal.

Today, the interest has shifted from one of agricultural demand to one more culinary. Less water is being put into the canals but the watermaster retains an important role.

The watermaster is a troubleshooter, Roberts said.

He tries to deal with day to day problems in a manner that builds a long-lasting working relationship between himself and the water users.

He walks the canal banks from end to end at least once a week, checking for breaks or problems that could lead to a bank failure.

He is on call 24 hours a day as a watermaster. But usually he isn't disturbed in the middle of the night.

However, during the flood of 1983, he got very little sleep. He spent a lot of time carefully juggling the peak in the reservoir against the amount of water the streams and canals would handle downstream.

In the drought year of 1977, he worked doubly hard making sure the scarce amount of available water stretched as fairly as possible to those awaiting it.

The Alta Ditch

The Alta Ditch was built by the Carry Brothers.

& built on the old Indian Trail escarpment on
top of the hills at water level grade along the
wall of the Provo Canyon.

This Ditch carried water from

Ref: Stanley H. Roberts July 1990.

ALTA DITCH AND CANAL COMPANY

In the early months of 1875, springs were discovered at Guard Quarters, about three miles above the mouth of Provo Canyon. (Guard Quarters was the remains of a stone house built by Mormon militia where they watched for the possible entry of Johnston's Army into the valley.) A group of men were looking for water in the area when they heard the sounds of an underground stream beneath their feet. They dug a tunnel into a ledge and discovered the stream source which was between two and three hundred feet above the bottom of the canyon. They named the new water supply Alta Springs.

The same year workers began digging a ditch to channel the water to farm land. It took ten years to complete the project. It skirted the side of the canyon and entered the valley about a quarter of a mile northwest of the mouth of the canyon. At this point the water went down a rocky ravine to the land on the bench. It then followed a northwest course for two miles and watered three hundred acres of land above the Provo Bench Canal. This land was planted mostly in orchards.

The Alta Ditch and Canal Company was incorporated in 1893. In 1957, Orem City secured an agreement with the Alta Ditch and Canal Company through which Orem traded irrigation water owned by the city to the Alta Ditch and Canal Company; in exchange, Orem City received water from the Alta Springs for its culinary system.

BLUE CLIFF CANAL

In 1885 a group of farmers living between the mouth of Provo Canyon and Pleasant Grove formed the Blue Cliff Canal Company for the purpose of constructing and controlling a canal to distribute water from the Provo River. The canal emerged onto the bench a short distance below the Alta Ditch Canal. Because of construction difficulties, no water was run into the canal until 1901. The company had a secondary river right, which meant that when the Provo River was running full, the high water could be run into the Blue Cliff Canal. It also had an interest in some springs originating in the area above the Murdock Diversion Dam, one and one-half miles up Provo Canyon. Half the water of the Blue Cliff Canal was later obtained by the Provo Reservoir Company.

THE PROVO RESERVOIR COMPANY

On 20 May 1909, the Board of Trustees of the Provo Bench Canal and Irrigation Company met in the Timpanogos meetinghouse with Joseph R. Murdock and Joseph B. Keeler concerning the Provo Reservoir Company which the latter two were organizing. The new company had secured rights to some springs and had purchased half the water of the

Blue Cliff Canal Company.

The Provo Reservoir Company maintained that a lot of water flowing from canals and ditches into Utah Lake was being wasted and therefore, subject to appropriation. The Provo Bench Canal and Irrigation Company and Provo City opposed this view, so the matter went to court in 1916. The Provo Reservoir Company won the case and received the rights to use water from the Provo River in their new canal.

The canal built by the Provo Reservoir Company became known as the Murdock Canal, named after Joseph R. Murdock, the founder of the company. Water was first turned through this canal in 1910.

The company constructed reservoirs at the head of the Provo River for water originating there and thus secured four thousand two hundred acre feet of water. It secured water from the Weber River and built a diversion canal to transport it. It built a canal from about a mile above the mouth of Provo Canyon northward through Utah Valley, skirting the foothills to the Jordan Narrows near Point of the Mountain. There it constructed a pumping plant and put two pumps into operation to carry the water in a concrete and steel pipe west across the Jordan Narrows where it was released from the pipe into two canals leading to farming districts, one branch running south into Utah County, a distance of about eight miles, and the other running north into Salt Lake County to a point west of Murray. Some 2,660 shares of Provo Reservoir Company water are now used on Provo Bench.

The Murdock Canal was later purchased by the Bureau of Reclamation as part of the Deer Creek Project. It now carries water from Deer Creek Reservoir as well as water from the Provo Reservoir Water Users Company, the successor to the Provo Reservoir Company. Because of several exchanges and agreements, the canal now carries water for several other companies also.

HEISELT SPRINGS

Heiselt Springs were purchased by Orem City from Hyrum Heiselt in 1927 for \$10,000. The springs



